

Pf-2782/nec/us/mh

## ABSTRACT OF THE DISCLOSURE

The present invention provides a phase comparator provided in a  
5 phase locked loop circuit, the phase comparator converting a phase  
difference between first and second input signals into a current signal,  
wherein the phase comparator has : a lock detector for detecting locked and  
unlocked states of the phase locked loop circuit to generate a detected  
signal which indicates one of the locked and unlocked states ; and a current  
10 source connected to the lock detector for receiving the detected signal from  
the lock detector and varying a supply current based on the detected signal,  
so that if the detected signal indicates the unlocked states, then the current  
source increases the supplying current.

15